The views of a group of funders/reviewers about the influence of retractions in the evaluation of grant proposals

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Rationale and Aims

Retractions have gradually changed the *modus operandi* of communicating and publishing science but the relationship retractions establish with the reward system of science in the context of research rewards and assessment, for example, is not yet understood.

How researchers/reviewers and funders from different fields and countries have perceived and helped shape these dynamics is the major question in this project.
Objectives

- To explore the views of international funders/reviewers about the influence of the correction of the literature, such as self-correction, in the reward system of science. We sought to identify possible trends in the perception of a sample of funders/reviewers from the US, Europe and Brazil.
Methodology

After approval of the Research Ethics Committee of the University Hospital of Rio de Janeiro (UFRJ), we conducted individual interviews with six members of the following institutions:

- National Institutes of Health;
- Northwestern University;
- European Commission;
- Health Research Board–Ireland;
- INSEEC – Business School;
- Research Foundation for the State of São Paulo – FAPESP
Methodology

- The leading questions were as follows:

  1. What are the main criteria used at your institution/agency in the evaluation process of grant proposals;
  2. In the same context, what is – or should be – the influence of retractions in that process?
Methodology

- After transcription of the interviews, the corpora were analyzed using the *Leximancer Digital Software* for text mining. We obtained conceptual maps to visualize the data, which allowed us to identify recurrent themes and concepts.
Build your model

Select Documents → Generate Concept Seeds → Generate Thesaurus → Generate Concept Map → Results

- Text Processing Settings
- Concept Seeds Settings
- Concept Seeds
- Thesaurus Settings
- Compound Concepts
- Concept Coding Settings
- Project Output Settings

Processing complete, outputs ready. (Cluster: complete. (4 seconds 4023 ms))

Project Log

https://info.leximancer.com/
Obviously, that one happened to be in your control, although it is fair to observe even Calor had had it out of mind because it had not been included in the inspection and maintenance regime but did it not suggest to Calor and it was some 12 years ago that underground pipework which is not subject of an inspection and maintenance regime is a potential hazard? A. In that case I don’t think the link was made, no.

Having spoken to our insurers, they are of the opinion that if we were to inherit a pipeline we hadn’t installed, they wouldn’t be able to insure it.

Q. Given where the industry is now and the stage at which the industry is now, does the fact that Calor might take over an underground pipe from another LPG supplier give Calor any comfort as to the state of the pipe?
What is the influence of a retraction (s) on a researchers’ CV at the moment that he/she is applying for funding in your institution/agency?
“...we can see all of the papers or articles that are associated with a particular grant, but they don’t always show whether or not they’re retracted or not....or corrected or not. So we don’t have a good way to track that right now.... . I think it’s important, now especially if there’s an expression of concern or retraction, because it’s possible that the research finding is not true in that case. So then I would be concerned why are they including this in their application if it’s been retracted?”
“…in a CV you might not see that there is a retractions...I don't think retraction is something, when you have a fraud case, a potential fraud case, I believe that you will have a retraction, volunteer retraction, for people that are really in best practices and really want to amend things and make things better. ... But for me it's not, I mean, it's like the burden of evidence or the burden of proof; you need to have several issues to really impact a review. I don't really, I don't know...again, it’s something very... It’s only an opinion, but I really don’t think that this might be paramount to the rest of the evaluation. What is important, again and again, is this going to put the project at risk or not?” 

Participant INSEEC
“...So you asked me a question, the question you asked would require me, I think us, as a society, scientific society, to actually understand the depth of the problem [misconduct in science]. I don’t know what fraction of those – is it one percent? if it’s only one percent, then I’m only looking for one or two; if it’s 25%, then that’s a much bigger deal. And we've done this, we’ve got some data on the published literature; I don’t think we have any data on preliminary data in proposals... I don’t know the answer to the question. And that’s a really sad situation, when we as scientists don’t have data on science”.

Participant Northwestern University

Ribeiro & Vasconcelos, 2018
“...both retractions and corrections are extremely important for the scientific record. They have major importance to getting the scientific record straight ... Retractions can happen, even (with) no misconduct... How do you... apply the same evaluation criteria on retractions in Mathematics, Astronomy or Social Sciences? I can assume that the beginning will be very heavy until the system goes through the growing pains and learns how to deal with it. If it’s a good idea, I would prefer that instead of having a perfect CV..”
“Well, they [the reviewers] have no way of knowing whether a paper has been retracted if they are not told about it. But we don’t systematically check every publication or check that person’s name, let’s say, in PubMed, to see whether or not they’re associated with retracted publications... Well, I think it would depend on the reason for the retraction. So if the retraction was because they found a flaw in the publication and they retracted it in an attempt to correct, there’s absolutely no issue with that.... If, on the other hand, we discovered that somebody had had one or more publications retracted due to misconduct, then I think that that would probably and prompt us to either not fund them.
“...the number of retractions is very small, so, it will take time to affect the evaluation system, I think... because few researchers have retractions and even fewer have a significant number of retractions and [there] are still researchers with a solid background of research that remain active ... you asked if in the near future there will be some influence... I do not see much reason to [...] Scientists know that the fact that an article is published does not mean that it is right [...] every scientist who reads the article has to make their analysis, their criticism...
Results

- The results suggested some consensus among participants that retractions are not (yet) a factor in the evaluation process of grant proposals. Overall, even self-correction of the literature would have a minor role. Another point was that, as retractions are not culturally included as an item in the curriculum of researchers, the evaluation criteria continue to be based on traditional items. Additionally, the fact that retractions are not necessarily related to misconduct would make their role less obvious in this type of evaluation.
Conclusions

- Although the publication record of researchers continues to be a factor in the evaluation of grants, the correction of the literature has a minor role, if any, in the process. So far, it remains unclear the extent to which the correction of the literature, particularly retractions, would influence the reward system of science, particularly funding, at least from the perspective of these participants.
Where do we go from here?

- PhD Project: 2018–2022

- We are going to collect the perceptions of funders and reviewers at the National Science Foundation (NSF) and in the National Institutes of Health (NIH) about the influence of retractions and self-correcting the literature on the overall evaluation of grant proposals.

- This step will be conducted during my stay at The University of California San Diego (UCSD) – supervision by Dr Michael Kallichman (September 2019–March 2020)
Maybe I will present the results at the 7th World Conference on Research Integrity.....

Let's hope!!!